

## ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 257, 261, 264, 265, 268, 271 and 302

[EPA-HQ-RCRA-2009-0640; FRL- ]

RIN - 2050-AE81

### HAZARDOUS AND SOLID WASTE MANAGEMENT SYSTEM; IDENTIFICATION AND LISTING OF SPECIAL WASTES; DISPOSAL OF COAL COMBUSTION RESIDUALS FROM ELECTRIC UTILITIES

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Proposed rule.

**SUMMARY:** The Environmental Protection Agency (EPA or Agency) is proposing to regulate for the first time, coal combustion residuals (CCRs) under the Resource Conservation and Recovery Act (RCRA) to address the risks from the disposal of CCRs generated from the combustion of coal at electric utilities and independent power producers. However, the Agency is considering two options in this proposal and, thus, is proposing two alternative regulations. Under the first proposal, EPA would reverse its August 1993 and May 2000 Bevill Regulatory Determinations regarding coal combustion residuals (CCRs) and list these residuals as special wastes subject to regulation under subtitle C of RCRA, when they are destined for disposal in landfills or surface impoundments. Under the second proposal, EPA would leave the Bevill determination in place and regulate disposal of such materials under subtitle D of RCRA by issuing national minimum criteria. Under both alternatives EPA is proposing to establish dam safety requirements to address the structural integrity of surface impoundments to prevent catastrophic releases.

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HAZARDOUS SUBSTANCE  
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Deleted: SUMMARY: The Environmental Protection Agency (EPA or Agency) is proposing to revise its 1993 and 2000 Bevill Regulatory Determinations regarding residuals generated from the combustion of coal at electric utilities and independent power producers, and to list such coal combustion residuals (CCRs) as hazardous wastes under Subtitle C of the Resource Conservation and Recovery Act (RCRA), when these materials are destined for disposal. However, this proposed rule will not address the placement of CCRs in minefills. The Agency will address the management of CCRs in minefills in a separate regulatory action. EPA is also not proposing to apply this listing or any requirements in this proposal to CCRs from state or federally required clean-ups commenced prior to the effective date of the final rule (e.g., prior to the effective date in the relevant authorized state).¶

¶ EPA is proposing land disposal restrictions and treatment standards for CCRs. For non-wastewaters, the proposed treatment standard is meeting the Universal Treatment Standards (UTS). For wastewaters, EPA is proposing to require that wastewaters undergo solids removal so that the wastewaters contain no greater than 100 mg/l total suspended solids (TSS), and meet the UTS. For surface impoundments, EPA is proposing design requirements in addition to those already required under the part 264 and 265 regulations, specifically dam safety requirements to address the structural integrity of surface impoundments to prevent catastrophic releases.¶

¶ The effect of this listing would be to prohibit CCRs from land disposal unless and until CCRs meet the proposed treatment standards. In addition, CCRs destined for disposal would be subject to the cradle-to-grave management standards under the rules implementing subtitle C of RCRA. The listing would also trigger emergency notification requirements for releases of hazardous substances to the environment under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Emergency Pla( ... [1]

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EPA is not proposing to change the May 2000 Regulatory Determination for beneficially used CCRs, which are currently exempt from the hazardous waste regulations under Section 3001(b)(3)(A) of RCRA. However, EPA is clarifying this determination and seeking comment on potential refinements for certain beneficial uses. EPA is also not proposing to address the placement of CCRs in mines, or non-minefill uses of CCRs at coal mine sites in this action.

**DATES:** Comments must be received on or before **[insert 90 days after publication in the Federal Register.]**

**ADDRESSES:** Submit your comments, identified by Docket ID No. **EPA-HQ-RCRA-2009-0640**, by one of the following methods:

- **www.regulations.gov:** Follow the on-line instructions for submitting comments.
- **Email:** Comments may be sent by electronic mail (e-mail) to *rcra-docket@epa.gov*, Attention Docket ID No. **EPA-HQ-RCRA-2009-0640**. In contrast to EPA’s electronic public docket, EPA’s e-mail system is not an “anonymous access” system. If you send an e-mail comment directly to the Docket without going through EPA’s electronic public docket, EPA’s e-mail system automatically captures your e-mail address. E-mail addresses that are automatically captured by EPA’s e-mail system are included as part of the comment that is placed in the official public docket, and made available in EPA’s electronic public docket.
- **Fax:** Comments may be faxed to 202–566–0272; Attention Docket ID No. **EPA-HQ-RCRA-2009-0640**.
- **Mail:** Send your comments to the Hazardous Waste Management System; Identification and Listing of Special Wastes; Disposal of Coal Combustion Residuals From Electric

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Utilities Docket, Attention Docket ID No., **EPA-HQ-RCRA-2009-0640**, Environmental Protection Agency, Mailcode: 5305T, 1200 Pennsylvania Ave., NW., Washington, DC 20460. Please include a total of two copies.

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- Hand Delivery: Deliver two copies of your comments to the Hazardous Waste Management System; Identification and Listing of **Special Wastes**; Disposal of Coal Combustion Residuals From Electric Utilities Docket, Attention Docket ID No., **EPA-HQ-RCRA-2009-0640**, EPA/DC, EPA West, Room 3334, 1301 Constitution Ave., NW., Washington, DC 20460. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.

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*Instructions:* Direct your comments to Docket ID No. **EPA-HQ-RCRA-2009-0640**. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at [www.regulations.gov](http://www.regulations.gov), including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through [www.regulations.gov](http://www.regulations.gov) or e-mail. The [www.regulations.gov](http://www.regulations.gov) website is an "anonymous access" system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA without going through [www.regulations.gov](http://www.regulations.gov), your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If EPA

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cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses. For additional information about EPA's public docket, visit the EPA Docket Center homepage at <http://www.epa.gov/epahome/dockets.htm>. For additional instructions on submitting comments, go to the **SUPPLEMENTARY INFORMATION** section of this document.

*Docket:* All documents in the docket are listed in the [www.regulations.gov](http://www.regulations.gov) index. Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available either electronically in [www.regulations.gov](http://www.regulations.gov) or in hard copy at the Hazardous Waste

Management System; Identification and Listing of Special Wastes; Disposal of Coal Combustion Residuals From Electric Utilities Docket, EPA/DC, EPA West, Room 3334, 1301 Constitution Ave., NW., Washington, DC 20460. This Docket Facility is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The Docket telephone number is (202) 566-0270. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744.

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**FOR FURTHER INFORMATION CONTACT:** Alexander Livnat, Office of Resource Conservation and Recovery, Environmental Protection Agency, 5304P; telephone number: (703) 308-7251; fax number: (703) 605-0595; email address: [livnat.alexander@epa.gov](mailto:livnat.alexander@epa.gov), or Steve Souders, Office of Resource Conservation and Recovery, Environmental Protection Agency,

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5304P; telephone number: (703) 308-8431; fax number: (703) 605-0595; email address:

souders.steve@epa.gov. For technical information on the CERCLA aspects of this rule, contact Lynn Beasley, Office of Emergency Management, Regulation and Policy Development Division (5104A), U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, D.C. 20460, [E-mail address and telephone number: Beasley.lynn@epa.gov (202-564-1965).] For more information on this rulemaking please visit <http://www.epa.gov/epawaste/nonhaz/industrial/special/fossil/index.htm>.

## **SUPPLEMENTARY INFORMATION:**

### **A. Does this Action Apply to Me?**

The proposed rule would apply to all coal combustion residuals (CCRs) generated by electric utilities and independent power producers. However, this proposed rule does not address the placement of CCRs in minefills. The U. S. Department of Interior (DOI) and EPA will address the management of CCRs in minefills in a separate regulatory action(s), consistent with the approach recommended by the National Academy of Sciences, recognizing the expertise of DOI's Office of Surface Mining Reclamation and Enforcement in this area.<sup>1</sup> In addition, under either alternative proposal, EPA is not proposing to affect the current status of coal combustion

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<sup>1</sup> The National Research Council (NRC) Committee on Mine Placement of Coal Combustion Wastes stated: "The committee believes that OSM and its SMCRA state partners should take the lead in developing new national standards for CCR use in mines because the framework is in place to deal with mine-related issues." National Academy of Sciences. Managing Coal Combustion Residues in Mines; The National Academies Press, Washington, D.C., 2006.

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residuals that are beneficially used<sup>2</sup> (See section [IV.D](#) for further details on proposed clarifications of beneficial use.) CCRs from non-utility boilers burning coal are not included within today's proposed rule. EPA will decide on an appropriate action for these wastes after completing this rulemaking effort.

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The proposed rule may affect the following entities: electric utility facilities and independent power producers that fall under the North American Industry Classification System (NAICS) code 221112, and hazardous waste treatment and disposal facilities that fall under NAICS code 562211. The industry sector(s) identified above may not be exhaustive; other types of entities not listed could also be affected. The Agency's aim is to provide a guide for readers regarding those entities that potentially could be affected by this action. To determine whether your facility, company, business, organization, etc., is affected by this action, you should refer to the applicability criteria [contained in section IV](#) of this preamble. If you have any questions regarding the applicability of this action to a particular entity, consult the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

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Hazardous wastes from specific sources  
section of the proposed rule

## B. What Should I Consider as I Prepare My Comments for EPA?

1. Submitting confidential business information (CBI). Do not submit information that you consider to be CBI through <http://www.regulations.gov> or by e-mail. Send or deliver information identified as CBI only to the following address: RCRA CBI Document Control

<sup>2</sup> The NRC committee recommended "that secondary uses of CCRs that pose minimal risks to human health and the environment be strongly encouraged." Ibid

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Officer, Office of Resource Conservation and Recovery (5305P), U.S. EPA, 1200 Pennsylvania Avenue, NW., Washington DC 20460, Attention Docket No, **EPA-HQ-RCRA-2009-0640**. You may claim information that you submit to EPA as CBI by marking any part or all of the information as CBI (if you submit CBI on a disk or CD ROM, mark the outside of the disk or CD ROM as CBI and then identify electronically within the disk or CD ROM the specific information that is claimed as CBI). Information so marked will not be disclosed, except in accordance with the procedures set forth in 40 CFR part 2. In addition to one complete version of the comment that includes information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be submitted for inclusion in the public docket. If you submit the copy that does not contain CBI on disk or CD ROM, mark the outside of the disk or CD ROM clearly that it does not contain CBI. Information not marked as CBI will be included in the public docket and EPA's electronic public docket without prior notice. If you have questions about CBI or the procedures for claiming CBI, please contact: LaShan Haynes, Office of [Resource Conservation and Recovery](#) (5305P), U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW., Washington DC 20460-0002, telephone (703) 605-0516, e-mail address haynes.lashan@epa.gov.

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2. Tips for Preparing Your Comments. When submitting comments, remember to:

- Identify the rulemaking by docket number and other identifying information (subject heading, Federal Register date and page number).
- Follow directions - The [Agency](#) may ask you to respond to specific questions or organize comments by referencing a Code of Federal Regulations (CFR) part or

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section number.

- Explain why you agree or disagree, suggest alternatives, and substitute language for your requested changes, and explain your interest in the issue you are attempting to address.
- Describe any assumptions and provide any technical information and/or data that you used.
- If you estimate potential costs or burdens, explain how you arrived at your estimate in sufficient detail to allow for it to be reproduced.
- Provide specific examples to illustrate your concerns, and suggest alternatives.
- Explain your views as clearly as possible.
- Make sure to submit your comments by the comment period deadline identified.

3. Docket Copying Costs. The first 100-copied pages are free. Thereafter, the charge for making copies of Docket materials is 15 cents per page.

**C. Definitions, Abbreviations and Acronyms Used in this Notice. (Note: Any term used in this proposed rulemaking that is not defined in this section will either have its normal dictionary meaning, or is defined in 40 CFR 260.10.)**

*Acre-foot* means the volume of one acre of surface area to a depth of one foot.

*Beneficial Use of Coal Combustion Products (CCPs)* means the use of CCPs that provides a functional benefit; replaces the use of an alternative material, conserving natural resources that

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would otherwise need to be obtained through practices such as extraction; and meets relevant product specifications and regulatory standards (where these are available). CCPs that are used in excess quantities (e.g., the field-applications of FGD gypsum in amounts that exceed scientifically-supported quantities required for enhancing soil properties and/or crop yields), placed as fill in sand and gravel pits, or used in large scale fill projects, such as for restructuring the landscape, are excluded from this definition.

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*Boiler slag* means the molten bottom ash collected at the base of slag tap and cyclone type furnaces that is quenched with water. It is made up of hard, black, angular particles that have a smooth, glassy appearance.

*Bottom ash* means the agglomerated, angular ash particles, formed in pulverized coal furnaces that are too large to be carried in the flue gases and collect on the furnace walls or fall through open grates to an ash hopper at the bottom of the furnace.

*CCR Landfill* means a disposal facility or part of a facility where CCRs are placed in or on land and which is not a land treatment facility, a surface impoundment, an underground injection well, a salt dome formation, a salt bed formation, an underground mine, a cave, or a corrective action management unit. For purposes of this proposed rule, landfills also include piles, sand and gravel pits, quarries, and/or large scale fill operations. Sites that are excavated so that more coal ash can be used as fill are also considered CCR landfills.

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*CCR Surface Impoundment* or impoundment means a facility or part of a facility which is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials), which is designed to hold an accumulation of CCRs containing free liquids, and which is not an injection well. Examples of CCR surface impoundments are holding, storage, settling, and aeration pits, ponds, and lagoons. CCR surface impoundments are used to receive CCRs that have been sluiced (flushed or mixed with water to facilitate movement), or wastes from wet air pollution control devices, often in addition to other solid wastes.

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*Cenospheres* are lightweight, inert, hollow spheres comprised largely of silica and alumina glass.

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*Coal Combustion Products (CCPs)* means fly ash, bottom ash, boiler slag, or flue gas desulfurization materials, that are beneficially used.

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*Coal Combustion Residuals (CCRs)* means fly ash, bottom ash, boiler slag, and flue gas desulfurization materials, destined for disposal. CCRs are also known as coal combustion wastes (CCWs) and fossil fuel combustion (FFC) wastes, when destined for disposal.

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*Electric Power Sector (Electric Utilities and Independent Power Producers)* means that sector of the power generating industry that comprises electricity-only and combined-heat-and-power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public.

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Existing CCR Landfill means a landfill which was in operation or for which construction commenced prior to the effective date of the final rule. A CCR landfill has commenced construction if the owner or operator has obtained the Federal, State and local approvals or permits necessary to begin physical construction; and either

- (1) A continuous on-site, physical construction program has begun; or
- (2) The owner or operator has entered into contractual obligations—which cannot be cancelled or modified without substantial loss—for physical construction of the CCR landfill to be completed within a reasonable time.

Existing CCR Surface Impoundment means a surface impoundment which was in operation or for which construction commenced prior to the effective date of the final rule. A CCR surface impoundment has commenced construction if the owner or operator has obtained the Federal, State and local approvals or permits necessary to begin physical construction; and either

- (1) A continuous on-site, physical construction program has begun; or
- (2) The owner or operator has entered into contractual obligations—which can not be cancelled or modified without substantial loss—for physical construction of the CCR surface impoundment to be completed within a reasonable time.

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*Flue Gas Desulfurization (FGD)* material means the material produced through a process used to reduce sulfur dioxide (SO<sub>2</sub>) emissions from the exhaust gas system of a coal-fired boiler. The physical nature of these materials varies from a wet sludge to a dry powdered material, depending on the process, and their composition comprises either sulfites, sulfates or a mixture thereof.

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